ABSTRACT

~~Disclosed is an~~ An MEMS variable optical attenuator ~~comprising~~ includes a substrate having a planar surface, a micro-electric actuator arranged on the planar surface of the substrate, a pair of coaxially aligned optical waveguides having a receiving end and a transmitting end, respectively, and ~~coaxially aligned with the other while being arranged on the planar surface,~~ an optical shutter movable to a predetermined position between the receiving end and the transmitting end of the optical waveguides, and driven ~~to move~~ by the micro-electric actuator~~, and a~~. A surface layer is formed on the optical shutter, ~~having~~ has reflectivity less than 80% so as [[for]]to allow incident light beams to partially transmit thereinto, and ~~having a characteristic of~~ further has a sufficient light extinction ratio, thereby extinguishing the partially transmitted light beams therein.